

What is claimed is:

1. A process for producing a display having a second substrate with a phosphor layer formed on a surface thereof, and a first substrate disposed opposing to said second substrate and having electron guns formed thereon, said electron guns having a structure of: a first conductive film laminated on the first substrate – an insulating film – a second conductive film, said process comprising: forming the insulating film by anodizing said first conductive film by using a non-aqueous electrolyte containing an organic solvent having an alcoholic hydroxyl group and at least one solute selected from salts of inorganic oxo acids and salts of organic carboxylic acids containing not more than 2 alcoholic hydroxyl groups.
2. A process according to claim 1, wherein the organic solvent having the alcoholic hydroxyl group is ethylene glycol or propylene glycol.
3. A process according to claim 1, wherein said inorganic oxo acid is one or more compounds selected from a group consisting of boric acid, phosphoric acid, sulfuric acid, tungstic acid, molybdic acid, chromic acid and vanadic acid, and said organic carboxylic acid is one or more compounds selected from a group consisting of salicylic acid, adipic acid, azelaic acid, phthalic acid, benzoic acid,  $\gamma$ -resorcylic acid, maleic acid, fumaric acid, itaconic acid, malonic acid, succinic acid, glutaric acid, dimethylmalonic acid and citraconic acid.
4. A process for producing a display having a second substrate with a phosphor layer formed on a surface thereof, and a first substrate disposed opposing to said second substrate and having electron guns formed thereon, said electron guns having a structure of: a first conductive film laminated on the first substrate – an insulating film – a second conductive film, said process comprising: forming the insulating film by anodizing said first conductive film by using a non-aqueous electrolyte containing an aprotic organic solvent and at least one solute selected from salts of inorganic oxo acids and salts of organic carboxylic acids.

5. A process according to claim 4, wherein the aprotic organic solvent is  $\gamma$ -butyrolactone or propylene carbonate.
6. A process according to claim 4, wherein said inorganic oxo acid is one or more compounds selected from a group consisting of boric acid, phosphoric acid, sulfuric acid, tungstic acid, molybdic acid, chromic acid and vanadic acid, and said organic carboxylic acid is one or more compounds selected from a group consisting of salicylic acid, adipic acid, azelaic acid, phthalic acid, benzoic acid,  $\gamma$ -resorcylic acid, maleic acid, fumaric acid, itaconic acid, malonic acid, succinic acid, glutaric acid, dimethylmalonic acid and citraconic acid.
7. A process for producing a display having a second substrate with a phosphor layer formed on a surface thereof, and a first substrate disposed opposing to said second substrate and having electron guns formed thereon, said electron guns having a structure of: a first conductive film laminated on the first substrate – an insulating film – a second conductive film, said process comprising: forming the insulating film by anodizing said first conductive film by using a non-aqueous electrolyte containing a mixed solvent comprising an organic solvent having an alcoholic hydroxyl group and an aprotic organic solvent and at least one solute selected from salts of inorganic oxo acids and salts of organic carboxylic acids.
8. A process according to claim 7, wherein the organic solvent having an alcoholic hydroxyl group is ethylene glycol or propylene glycol.
9. A process according to claim 7, wherein said aprotic organic solvent is  $\gamma$ -butyrolactone or propylene carbonate.
10. A process according to claim 7, wherein said inorganic oxo acids is one or more compounds selected from a group consisting of boric acid, phosphoric acid, sulfuric acid, tungstic acid, molybdic acid, chromic acid and vanadic acid, and said organic carboxylic

acid is one or more compounds selected from a group consisting of salicylic acid, adipic acid, azelaic acid, phthalic acid, benzoic acid,  $\gamma$ -resorcylic acid, maleic acid, fumaric acid, itaconic acid, malonic acid, succinic acid, glutaric acid, dimethylmalonic acid and citraconic acid.